Development and Use of Water Treatment Data in Food Quality Protection Act: Drinking Water Exposure Assessments

Sid Abel Branch Chief Office of Pesticide Programs (703) 305-7346 abel.sid@epa.gov

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The Food Quality Protection Act (FQPA) of 1996 requires the incorporation of drinking water as a route of pesticide exposure in human health risk assessments. A challenging exposure issue has been the assessment of the impact of water treatment processes on pesticide removal and transformation. Some of the challenges include addressing spatial and temporal variability of treatment processes and raw water qualities, developing consistent laboratory testing protocols to assess water treatment effects, addressing scaling issues from laboratory to field data, and developing strategies for incorporation of water treatment data into FQPA drinking water exposure assessments. The poster provides an overview of the collaborative effort of Office of Prevention, Pesticides and Toxic Substances (OPPTS) and Office of Research and Development (ORD) on development and testing of laboratory treatment studies on conventional treatment, softening and chlorination in ground and surface waters, their use in FQPA drinking water exposure assessments and the role these data may play in risk management.